

REMARKS

Applicants herein amend claims 1, 2 and 5.

Applicants herein add new claims 29 - 32.

Applicants also note that claims 10-18 and 20-27 were withdrawn by Applicants' election in their September 27, 2005 reply to the Examiner's restriction requirement.

In the Official Action, the Examiner stated that Applicants' Information Disclosure Statement ("IDS") filed June 24, 2002 "does not list any references and is essentially blank," and thus does not comply with the provisions of 37 C.F.R. §§ 1.97 & 1.98 and MPEP § 609. The Examiner further states that the IDS "appears to have been reproduced incorrectly, resulting in a missing portion of the paper."

Applicants submit herewith a clearly legible replacement IDS and the required fee, together with a clearly legible copy of the single item of prior art cited therein, a non-patent document entitled, "A Study of Non-Blocking Switching Networks," by Charles Clos, published March, 1953.

Also in the Official Action, the Examiner objected to claims 5-9 and 19 as being in improper multiple dependent form. Independent claim 5 has been amended herein to remove the improper multiple dependency. Thus, claim 5 as amended and claims 6-9 and 19, which depend from claim 5, are now in allowable form.

Applicant has also added new claims 28-32. New independent claim 28 is added to replace an embodiment removed from amended claim 5, whereas new claims 29-32 are dependent from new claim 28. The new claims are fully supported by the original claims 5-9 as well as by the Specification, for example at page 9, lines 1-10.

Also in the Official Action, the Examiner rejected claims 1-3 under U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,335,992 to *Bala, et al.* The Examiner states that *Bala, et al.* discloses an  $n \times m$  switch for use in a first stage or the final stage of an  $N \times N$  multi-stage optical switching architecture, as depicted in FIG. 1C. The Examiner further states *Bala, et al.* also

discloses "sufficient input and output ports to satisfy the Clos nonblocking criteria ... at least one extra input port ... at least one extra output port ... where the extra input and output ports are unallocated." See, Office Action, page 4, line 1 - 8.

Applicants have amended independent claims 1 and 2 to include the use of at least one of the extra output ports for fault isolation, as taught in the Specification at least at page 13, lines 5-7.

Applicants submit that *Bala, et al.* significantly lacks any disclosure of using extra output ports for fault isolation at the individual switch level, as recited in claims 1-3, as amended. Therefore, the rejection of claims 1-3 should be withdrawn.

Also in the Office Action, the Examiner rejected claim 4 under U.S.C. §103(a) as being obvious in view of *Bala, et al.* The Examiner admits that *Bala, et al.* does not disclose that a final stage switch module may have spare ports such that  $n=m$ , as recited in claim 4. See, Official Action, page 5, lines 3-4. However, the Examiner states that it would have been obvious to a person of ordinary skill in the art to provide further extra ports on the final stage such that  $n=m$ , and further that "[t]he claimed differences exist not as a result of an attempt by Applicants to solve an unknown problem but merely amount to selection of expedients known as design choices ..." See, Official Action, page 5, lines 11-13. Applicants respectfully disagree.

First, *Bala, et al.* merely recites "[s]witches 111, 121, and/or 131 may have additional input and/or output ports (not shown) that may be used for other purposes, such as testing, service channels, local connections, or other purposes." See *Bala, et al.*, column 6, lines 5-8. This statement falls far short of suggesting the addition of additional spare ports in the final stage such that  $n = m$ , as recited in claim 4. Moreover, as claim 4 depends from claim 2, as amended herein, the use of extra ports for fault isolation is not suggested at all by *Bala, et al.* Not only is the use of extra ports for fault tolerance completely absent

from *Bala, et al.*, which explicitly lists testing, service channels and local connections as potential uses, but it would be improper hindsight for the Examiner to interpret "or other purposes" in *Bala, et al.* to include fault isolation. For this reason, rejection of claim 4 should be withdrawn.

Moreover, the Examiner has stated in conclusory fashion that it would have been obvious to one of ordinary skill in the art to provide further extra ports on the final stage such that  $n=m$ . Thus, the Examiner does not provide any reason for her conclusion. If the Examiner's conclusion is based on facts within her personal knowledge, Applicants respectfully request that she provide data as specifically as possible and support the conclusion with facts by way of an affidavit. See M.P.E.P. §2144.03.

As it is believed that all of the rejections set forth in the Office Action have been overcome by the amendments and remarks herein, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such can be taken at this time, it is respectfully requested that he/she telephone applicant's attorney at (732) 634-7634 in order to overcome any additional objections which he might have.

In the event there are any fees due and owing in connection with this matter, please charge same to our Deposit Account No. 11-0223.

Dated: March 17, 2006

Respectfully submitted,

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